



MULTIHAUL™ TG TERMINAL UNIT T261

Mini Form Factor RF2 Extended Range Customer Node for Gigabit FWA

The MultiHaul™ TG system is Siklu-by-Ceragon's 3rd generation of Terragraph-certified 60GHz Point-to-Multipoint products. This TG network consists of Distribution Nodes (DNs) operating over ultra-wide, free to use, millimeter waves in a redundant mesh topology, connected to Terminal Units (TUs). The T261, our mini-TG TU, communicates with a MultiHaul TG Distribution Node via the TG protocol, acting as an endpoint in a fully meshed MH TG topology. As Siklu-by-Ceragon's latest TG TU, the T261 is a compact, aesthetic unit, ideal for single-family homes and other applications requiring easy-to-install gigabit performance, integrating features from its predecessors.

A Wide Range of Applications

- Fixed 5G Wireless Access, Gigabit to the Home, the MDU and the Enterprise
- Wi-Fi Hotspot Backhaul
- Security / Safe City Networks
- Smart City Municipal networks

Small but Powerful

There can be no doubt that the smaller the TU is, the more options customers have for deployment. Typically, in wireless systems, going smaller means sacrificing performance. With the T261, Siklu-by-Ceragon has broken new ground, delivering the full Gigabit in a form factor that is impressive with its dramatically smaller size.

Always-On Mission Critical Networks

When you can't afford to lose a video stream, critical safe city sensor data, or any other mission-critical data, you need a wireless network that is as reliable and secure as fiber. With maximal immunity to interference and hacker-proof links with embedded AES encryption, MultiHaul TG delivers a network you can count on. With the mesh topology there are built in redundant paths for traffic if an outage occurs in each link.

Simple Integrated Future-Safe Terminal Unit

Wireless infrastructure should be simple and future proof. Organizations want to quickly deploy a single box across the target neighborhood, knowing that they have options to meet the interface requirements of any application. With a built-in software-configured Ethernet switch, the T261 Terminal Unit can address all your small form factor applications.

Fiber Quality with Wireless Flexibility

The Siklu-by-Ceragon millimeter wave radios successfully combine the capacity of fiber with the flexibility, speed of deployment, and low TCO of wireless networks. That is what has made them among the world's best-selling millimeter wave radios every year since 2011. They provide rock solid performance, even in very dense networks or under severe weather conditions, in thousands of networks around the globe.

Highly Secure and Physically Immune Beams

The narrow beamwidth confers several advantages including immunity to interference and network jamming, in contrast to wide-beam wireless systems that need to use multiple strategies to perform in dense areas. Multiple subscribers and services can be connected with complete isolation based on physical port, VLAN ID and/or a Terminal Unit.

Ready Set Go

The plug and play TU is designed for an easy single-person installation. The in-house developed unique RF2 scanning antennas automatically, aligns with serving Distribution Node. And with auto-connect, no laptop or mobile device needed, the T261 allows plug and play deployment in a very short time.





MULTIHAUL™ TG MINI TERMINAL UNIT T261

RF2 Extended Range 60GHz PtMP Terminal Unit Radio – Specifications

Topologies	Point to Multi-point, L2 SDN Mesh
Frequency & Duplexing	57-66GHz, TDD/TDMA, 4 channels.
Channel Bandwidth, Modulation & Adaptive Coding, TPC	2160MHz, BPSK to QAM16, up to 10 levels of hitless adaptive bandwidth, coding, and modulation – boost gain by over 29dB. Automatic Transmit Power Control (ATPC).
Radio Throughput	Up to 1 Gbps full duplex
System Gain (link budget)	RF2, up to 130dB (Node to TU, including RF2 antenna gain) resulting $\leq 270\text{m}/885\text{ft}$. link length from Distribution Node. Please refer to Ceragon SmartHaul™ Link Budget Calculator (lbc.ceragon.com) for radio link performance models.
Self-alignment scanning, mechanical adjustment	Horizontal scanning: 90°, Vertical scanning: $\pm 12^\circ$ / vertical elevation adjustment $\pm 20^\circ$.
Network synchronization	To N36x/N265/N892 nodes
Interface (data + power)	1x RJ-45 1GbE with PoE-In.
Ethernet Features	IEEE 802.1d transparent bridging, Provider bridge - VLAN & VLAN stacking.
Security	AES 128-bits OTA, GUI over HTTPS, CLI over SSH, IP-less operation.
Management & Provisioning	In-band, IP-less management, Web GUI (one-pane configuration of local and remote units) & Embedded CLI, NETCONF, SNMP.
Conformance	Radio: US FCC 47 CFR Part 15.255; EN 303 722, EMC: US FCC 47 CFR Part 15; EN 301 489, Safety: UL/IEC 62368-1; UL/IEC 60950-22.
Terragraph	Terragraph certified.
Power Supply	PoE-In (IEEE 802.3af/802.3bt class 3 or passive), 12.5W.
Environmental	Operating Temperature: $-4^\circ \div +131^\circ\text{F}$ ($-20^\circ \div +55^\circ\text{C}$); Ingress Protection Rating: IP67.
Dimensions	4.3 x 6.2 x 2 in. / 108 x 157 x 52 mm. (W x H x D), mounting kit not included.
Weight	3.4 lbs. / 1.7 Kg.
In the Box	Terminal unit with attached all-weather-shell and mounting kit, metallic bands, indoor PoE power supply with AC cable, Quick Start Guide.

Ordering Information

OPS P/N	Marketing P/N	Description
VEHP362	MH-T261-CNN-N-MWB	MultiHaul™ TG Radio with an Integrated 90° Beam Forming Antenna, 1,000Mbps FD Capacity, RJ-45 Port, Mounting-Kit, 2x Metal Bands, AC PoE Injector & All-Weather-Shell. IP-67, White.
VSRG014	AX-SRG-10G-OD	1/10 GbE Ethernet/PoE Surge Protector (outdoor) 802.3ab/bz/an
VPSU029	EH-H-PoE-DC-PSU-TB	DC PoE Injector, unregulated direct DC up to 2.5A (requires 48VDC source. Terminal block included).